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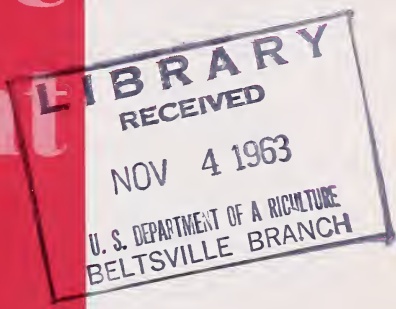
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UNITED STATES
DEPARTMENT
OF AGRICULTURE

PA- 592



The Imported Fire Ant





The Imported **FIRE ANT**

The imported fire ant, a serious pest of animals, people, and crops in the South, is the target of a cooperative, Federal-State eradication program.

Although it resembles native species of fire ants, the imported fire ant is a vicious, aggressive creature.

When their mound is disturbed, the ants attack by sinking powerful jaws into the skin, then repeatedly thrust their poisonous stingers into the flesh. The stings cause long-lasting sores which sometimes leave scars. People allergic to the stings may require medical care.

ECONOMIC DAMAGE

Imported fire ants are destructive, costly, and are a nuisance. However, major losses from this pest are reduced efficiency of labor and machinery—losses hard to assess in dollars.

Since ants prefer land exposed to the sun, some of the most valuable farming and pasture land is most heavily infested. Improved pastures and hay fields are especially hard hit.

Farmers lose valuable time during seeding, fertilizing, and harvesting of crops.

They also find it difficult to hire workers to go into fields inhabited by these fiery little pests.

DIRECT DAMAGE

Imported fire ants cause direct damage to some crops. They injure vegetable crops by sucking juices from the stems of plants and by gnawing holes in roots, stalks, buds, ears, and pods. They attack pasture grasses, cereal and forage crops, young corn, nursery stock, and fruit trees.

Farmers have reported fire ants attacking and killing newborn pigs, calves, sheep, and other animals; newly hatched chicks; and the young of ground-nesting birds.

OFF FARM LOSSES

The ants are not just a farm problem. Highway departments and railroad companies must contend with fire ant mounds on their rights-of-way. Mounds in lawns, cemeteries, parks, playgrounds, school yards, golf courses and other recreation areas are eyesores and hamper the care of grounds. It isn't safe to let young children play around fire ant mounds.

Imported fire ant mounds dot this open field.

ERADICATION PROGRAM

Although imported fire ants have been in the United States since around 1920, they did not constitute a serious problem until several years ago when they had a "population explosion."

In 1953, the pests were found in 100 counties in 10 States. By 1956, they had spread at an even more alarming rate. Congress and the U.S. Department of Agriculture were besieged by farmers and homeowners seeking help in battling the invaders. Therefore, in 1957, Congress directed the Department to develop proposals and plans to eradicate the imported fire ants.

HOW THE PROGRAM OPERATES

Various phases of the imported fire ant program are coordinated by representatives of Federal and State Departments of Agriculture who work with local people in planning and conducting the eradication program. All work is done under the supervision of trained State and Federal pest control workers.

Cost of the program is shared by the Federal Government, States, counties, cities and individuals.

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THE TREATMENT

Properly used insecticides are the only practical means of ridding an area of imported fire ants. Insecticides are applied by aircraft, motorized ground machinery, and hand applicators.

Each area is studied to determine the proper method and timing for the application.

Aircraft are used to treat large, generally infested, open areas, and places not easily reached by other equipment.

Ground equipment, motorized and hand, is used to treat small blocks in easily accessible places or to retreat occasional mounds that reappear.

Sometimes various combinations of aircraft and other methods are used.

Isolated infestations beyond the boundary of the generally infested areas are treated first to shrink the outer edge of the infestations.

INSECTICIDES USED

Two insecticides are currently used in the imported fire ant program. They are: (1) heptachlor, once used almost exclusively, and (2) a newly-developed bait called Mirex.

The new bait was field tested in 1961 and put into general use in 1962. It is composed of soybean oil, an attractant; Mirex, an insecticide; and ground corncob grits, which make it possible to properly distribute the other two ingredients. USDA entomologists searched for more than 10 years for an effective imported fire ant bait. They tested hundreds of preparations before they found this highly-effective combination.

The principal advantage of this preparation is the small amount of insecticide required. Only $\frac{1}{4}$ ounce of actual insecticide, applied in amounts of 5 or 10 pounds of the corncob grits and soybean oil per acre, will wipe out entire ant colonies. While feeding on the soybean oil, a favored food, the ants receive a minute, but fatal, amount of toxicant. Insecticides that depend upon accidental contact require larger dosages.

Thousands of acres of fire ant-infested land have already been treated successfully with the



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Loading an airplane with insecticide.

The mention of commercial products in this publication does not constitute an endorsement by the U.S. Department of Agriculture over other products not mentioned.

new bait. It has had no effect on wildlife. It results in no harmful residue in milk, meat or vegetables, and can be applied to pastures containing dairy or beef cattle without removing the animals. The bait is made in two formulations: one containing .15 percent Mirex, applied at 5 pounds per acre; and the other containing .075 percent Mirex, applied at 10 pounds per acre. Each formulation deposits 3.4 grams of the toxicant uniformly distributed on each acre.

Heptachlor, an effective and economical material, will still be used in some areas. These include nurseries, industrial sites, and other places where the long lasting effectiveness of heptachlor is necessary. In addition, this insecticide may be used to spot treat previously treated areas as part of "mop-up" operations.

When heptachlor is used, it is mixed with a special clay and applied in a dry, granular form that sifts readily through foliage. After the granules reach the ground, the insecticide is released and kills ants on contact. Heptachlor will be applied with ground equipment, either mechanical or manual.

SAFETY

Close Federal or State supervision of eradication activities is maintained at all times. When aircraft are used, the application is supervised

from the air while ground crews mark the swath widths with special balloons. Radio communications coordinate operations.

YOU HAVE A STAKE

Yes, you have a stake in the imported fire ant eradication program.

If allowed to build up, the ants become numerous enough to lower the value of your land, annoy and possibly injure members of your family and friends, reduce crop yields, and harm livestock and pets. They could eventually spread throughout the South and westward to the Pacific coast.

To help make the program work:

- Do not move soil from an infested to an uninfested area unless it has been treated.
- Consult your local plant pest control inspector before you move soil, stump wood or plants from infested areas.
- Report new imported fire ant infestations to your county agricultural agent or State entomologist as soon as you spot the mounds.
- When a program that includes your property has been set up, cooperate with officials and follow all the protective measures adopted by Federal and State Governments.

The success of this program depends upon your support.

THIS PROGRAM AID SUPERCEDES
PA-368, "THE FIGHT AGAINST
THE IMPORTED FIRE ANT."

Prepared by
Plant Pest Control Division
Agricultural Research Service

Washington, D.C.

Issued October 1963